18. The process of claim 16 wherein at least two types of nylon are present in the carpeting, wherein the at least two types of nylon are dissolved in a solvent at at least a temperature wherein all the types of nylon are dissolved; cooling the solvent to a temperature for which one type of nylon precipitates out, but above the dissolution temperature of the remaining types of nylon; removing the precipitate; and then cooling the solvent to a temperature for which another type of nylon precipitates out and repeating the removal of precipitate and cooling steps until all types of nylon have been precipitated.

19. The process of claim 17 wherein two types of nylon are present in the carpeting.

20. The process of claim 19 wherein the two types of nylon are Nylon 6 and Nylon 6,6.

21. The process of claim 18 wherein two types of nylon are present in the carpeting.

22. The process of claim 21 wherein the two types of nylon are Nylon 6 and Nylon 6,6.

23. The process of claim 16 further comprising reducing the carpeting to granular particulate form prior to dissolving the nylon.

24. The process of claim 23 further comprising separating inert solids and non-fibrous fillers from the carpet prior to dissolving the nylon.

25 The process of claim 16 wherein the carpeting contains at least one other fiber.

26. The process of claim 25 wherein the at least one other fiber comprises a synthetic polymer fiber.

27. The process of claim 26 wherein the at least one other fiber is a polyester.

28. The process of claim 26 wherein the at least one other fiber is a polyamide.

29. The process of claim 26 wherein the at least one other fiber is a terephthalate polymer.

30. The process of claim 26 wherein the at least one other fiber comprises a natural fiber.

31. The process of claim 16 wherein the solvent is glycerol.

32. The process of claim 16 wherein the solvent is ethylene glycol.